

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re application of:** Yoshimura and Kamohara

**Application No.** 10/507,385

**Filed:** September 9, 2004

**Confirmation No.** 8908

**For:** USE OF DISCOIDIN DOMAIN RECEPTOR  
1 (DDR1) AND AGENTS THAT AFFECT  
THE DDR1/COLLAGEN PATHWAY

**FILED VIA EFS**

**Examiner:** Maria Gomez Leavitt

**Art Unit:** 1633

**Attorney Reference No.** 4239-64104-02

FILED VIA ELECTRONIC FILING SYSTEM  
UNITED STATES PATENT AND TRADEMARK OFFICE

**DECLARATION OF PRIOR INVENTION UNDER 37 C.F.R. §1.131**

I, Teizo Yoshimura, hereby declare as follows:

1. I am named as a co-inventor of U.S. Patent Application No. 10/507,385, filed September 9, 2004 which is the § 371 U.S. National Stage of International Application No. PCT/US02/39793, filed December 11, 2002, which in turn claims the benefit of U.S. Provisional Application No. 60/363,734, filed March 12, 2002; U.S. Provisional Application No. 60/380,978, filed May 15, 2002; and U.S. Provisional Application No. 60/419,179, filed October 16, 2002. The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services is the assignee of U.S. Application No. 10/507,385 (hereinafter the '385 application).

2. It is my understanding that claims 17 and 18 of the '385 application have been rejected by the U.S. Patent and Trademark Office for allegedly being unpatentable over Radziejewski *et al.* (U.S. Patent No. 6,022,694), in view of Lipford *et al.* (U.S. Published Patent Application No. 2003/0148316, filed August 1, 2002).

3. Claims 17 and 18 are directed to the use of an anti-Discoidin Domain Receptor 1 (DDR1) antibody to activate DDR1. As a named co-inventor of the subject matter described in claims 17 and 18, this declaration is presented to demonstrate prior invention of this subject matter.

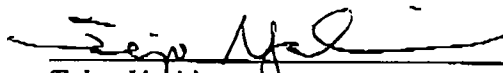
4. Prior to August 1, 2002, I conceived the use of an anti-Discoidin Domain Receptor 1 (DDR1) antibody to activate DDR1 and induce the maturation of an immature macrophage or an immature dendritic cell. Attached as **Exhibit A** is a photocopy of an Employee Invention Report (EIR) signed and dated by me on January 9, 2002. **Exhibit A** clearly sets forth the idea, prior to August 1, 2002, to use an anti-DDR1 activating antibody to activate DDR1 in order to enhance the maturation of macrophages and dendritic cells.

5. Following the January 9, 2002 date of **Exhibit A**, I diligently reduced to practice the subject matter of claims 17 and 18, as evidenced by the following. Work related to identifying and testing components involved in the activation of DDR1 and the maturation of macrophage or dendritic cell maturation was continuously performed following January 9, 2002, and was disclosed in U.S. Provisional Application No. 60/363,734, filed March 12, 2002, and U.S. Provisional Application No. 60/380,978, filed May 15, 2002. Furthermore, **Exhibit B** (from a facsimile dated August 14, 2002) clearly presents data demonstrating the reduction to practice of the use of an anti-DDR1 antibody to activate DDR1.

6. Thus, the idea to use an anti-DDR1 antibody to activate DDR1 was conceived prior to August 1, 2002, and was coupled with due diligence until reduction to practice no later than August 14, 2002. All the work described in this declaration was done in the United States of America, which is a NAFTA country.

7. All statements made herein and of my own knowledge are true and all statements made on information are believed to be true; and further, these statements were made with the knowledge that willful false statements and like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that any such willful false statements made may jeopardize the validity of the application or any patent issuing thereon.

Date 4/13/09

  
Teizo Yoshimura